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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/993,698

11/27/2001

Keiichi Sakuno

0020-4933P-SP

8373

2292

7590

03/01/2004

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EXAMINER

NGUYEN, KHANH V

ART UNIT

PAPER NUMBER

2817

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/993,698	SAKUNO, KEIICHI	
	Examiner	Art Unit	
	Khanh V. Nguyen	2817	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-9, 17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-9, 17 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furino (6,452,452).

Furino discloses the claimed invention except the impedance of the negative feedback depends on a signal voltage occurring across the negative feedback circuit. Furino (Fig. 3) discloses an amplifier circuit comprising: a power amplifier (30) and a negative feedback circuit comprises diode (50) and capacitor (60) connected in series. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have change the component value of the feedback circuit (50, 60) to obtain a desired change of the impedance of the feedback. And likewise, increase the input signal would have resulted in the increase of the feedback impedance.

Claims 2, 3, 5-9, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carney et al. (3,098,199).

Carney et al. disclose the claimed invention except the impedance of the negative feedback depends on a signal voltage occurring across the negative feedback circuit. Carney et al. (Fig. 1) disclose an amplifier circuit comprising: a power amplifier (10) and a negative feedback circuit comprises diodes (24, 25) and capacitors (22, 23)

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connected in series. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have change the component value of the feedback circuit (50, 60) to obtain a desired change of the impedance of the feedback. And likewise, increase the input signal would have resulted in the increase of the feedback impedance.

Regarding claims 6-9, it is known in the art that diode and diode connected transistor can be used interchangeably wherein the transistor can be bipolar or field effect transistor and base-collector or base-emitter are commonly used. Regarding claim 9, wherein the change in size of a component is generally recognized as being within the level of ordinary skill in the art.

Claims 4, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kahn (5,023,951).

Kahn discloses the claimed invention except the impedance of the negative feedback depends on a signal voltage occurring across the negative feedback circuit. Kahn (Fig. 7) discloses an amplifier circuit comprising: a power amplifier (13) and a negative feedback circuit comprises diode (10), resistor (30), and capacitor (15) connected in series. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have change the component value of the feedback circuit (10, 30, 15) to obtain a desired change of the impedance of the feedback. And likewise, increase the input signal would have resulted in the increase of the feedback impedance.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references (Wolf et al. (4,009,447); Dion (4,764,732); Florian et al. (5,546,050); Kim et al. (6,057,736)) show further analogous prior art circuitry.

This art is deemed relevant and should be carefully reviews before any amendment is filed.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh V. Nguyen whose telephone number is (703) 306-9058. The examiner can normally be reached from 8:00 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (703) 308-4909. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service at (703) 872-9317.

*NKD*

02/24/04

A handwritten signature in black ink, appearing to read 'Khanh V. Nguyen', written over a horizontal line.

*Nguyen, Khanh Van*

*Group 2800, Art Unit 2817*